

## ABSTRACT OF THE DISCLOSURE

An optical waveguide device including an electro-optical crystal substrate having a top surface and a bottom surface; an optical waveguide path formed within a surface of the electro-optical crystal substrate; at least one electrode positioned above the optical waveguide path for applying an electric field to the optical waveguide path; and a silicon titanium oxynitride layer and a connecting layer for interconnecting the silicon titanium oxynitride layer to another surface of the electro-optical crystal substrate that is opposite to the surface in which the optical waveguide path is formed.